

REMARKS

Claims 1, 2 and 5-8 are pending in this application. By this Amendment, claims 1, 2 and 5-8 are amended. The amendments to the claims introduce no new matter as they simply serve to clarify the subject matter recited in the claims. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The Office Action, in paragraph 2, rejects claims 5-8 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Office Action alleges that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed. Specifically, the Office Action asserts that the last two lines of independent claim 5, define a means for heating and/or cooling the liquid and that the only reference in the claim to a liquid is in the context of the preprocessing machine, concluding that since the original disclosure does not describe cooling means as part of the preprocessing means this phrase is considered to be new matter.

Applicants respectfully submit that the Office Action inappropriately separates individual portions of the claim language. Claim 5 is directed to an apparatus for producing a pneumatic tire. This apparatus comprises a number of features including a preprocessing machine comprised of (i) joining means ... and (ii) preliminary inflating means for supplying a liquid into a bladder, and separately means for circulating liquid through the bladder; and means for heating and/or cooling the liquid as the liquid is circulated through the bladder. Applicants respectfully submit that, once the liquid is introduced into the bladder, separate means may be available to circulate the liquid through the bladder and to heat and/or cool the liquid as the liquid is circulated through the bladder, and that such means are not necessarily associated with the preprocessing machine. Such means are, in fact, disclosed at least at

paragraphs [0034] and [0054] of the specification as originally filed. It is noted, however, that the liquid so circulated may or may not be the same liquid used in the preliminary inflating, and claim 5 has been clarified in this regard.

The Office Action goes on to assert, in paragraph 2, that "along these same lines, the reference in new claim 7 to a 'heat exchanger' in the context of the heating means for the liquid in the preprocessing machine is not described...." Applicants again respectfully submit that the heating and/or cooling means need not be associated with the preprocessing machine for at least the reasons enumerated above.

Finally, paragraph 2 of the Office Action states that claim 8 defines a first transfer device that transfers the tire to the vulcanizer and a second transfer device that transfers the tire from the vulcanizer to a post-cure inflator. Claim 8 is amended to better clarify the nature of the first transfer device and the second transfer device as described in the specification, in exemplary fashion, at least at paragraphs [0048] and [0055].

Accordingly, reconsideration and withdrawal of the rejection of claims 5-8 under 35 U.S.C. §112, first paragraph, are respectfully requested.

The Office Action, in paragraph 3, rejects claims 1 and 8 under 35 U.S.C. §103(a) as being unpatentable over European Patent No. EP 578,106 to Bridgestone taken in view of U.S. Patents Nos. 3,621,520 to Ulm and/or 2,963,737 to Soderquist and further in view of U.S. Patents Nos. 5,853,526 to Laurent et al. (hereinafter "Laurent") and/or 3,864,189 to Galleithner et al. (hereinafter "Galleithner"); and Japanese Patent No. JP 02-22016 to Bridgestone (hereinafter "the '016 patent"). The Office Action, in paragraph 4, rejects claim 2 under 35 U.S.C. §103(a) as being unpatentable over Bridgestone taken in view of Ulm and/or Soderquist and further in view of Laurent and/or Galleithner and the '016 patent as applied to claim 1 above, and further in view of U.S. Patent No. 6,620,367 to Mitamura. The Office Action, in paragraph 5, rejects claims 5-7 under 35 U.S.C. §103(a) as being unpatentable over

Mitamura taken in view of Laurent and/or Galleithner and U.S. Patents Nos. 1,612,565 to Brown or 4,861,253 to Mattson. These rejections are respectfully traversed.

At the outset, Applicants respectfully submit that the Office Action is improper for at least the following reasons: (i) the grounds for rejection are very generally stated; and (ii) Applicants' arguments and claim amendments from the prior Amendment, filed on June 21, 2004 in response to a non-final rejection, are not adequately nor specifically addressed in this Office Action. Specifically, regarding point (ii), Applicants' previous arguments are addressed only in paragraph 6 of this Office Action with the blanket statement that Applicants' arguments have been considered but are moot in view of the new grounds of rejection necessitated by the amendments to the claims and the newly presented claims, but then the Office Action attempts to rely on the "same reasons as set forth in the last Office Action" in its assertions regarding various claim features, which were previously rebutted by Applicants. For example, on page 7 of the June 21 Amendment, Applicants argued that Mitamura does not disclose the concept of heating and/or cooling the liquid as the liquid is circulated through the bladder, as is recited, among other features in claim 5. The Office Action fails to substantively address this point.

To the extent that new art has been applied in an attempt to find all of the features recited in at least independent claims 1, 5 and 8 to have been suggested by the prior art, Applicants respectfully submit the following. The Office Action newly cites Laurent and Galleithner as allegedly "both directed to bladder assemblies that are used to form green tires in toroidal shape and in particular evidence that it is understood in the art that a liquid can suitably and effectively be used in this role" asserting that the use of such would, therefore, have been obvious. Applicants respectfully disagree.

Regarding Laurent, the Office Action relies on col. 3, lines 9-24 for a teaching of using a liquid for preliminary inflation. This is not correct, because the cited passage refers to

circulation of liquid or other fluid at a vulcanization station. There is no disclosure of a preliminary inflation using a liquid prior to transfer to the vulcanization station. Galleithner discloses using a fluid, but in a context that appears quite different from that claimed by Applicants. Galleithner appears to disclose shaping of a tire using a liquid, but Applicants disagree that Galleithner discloses preliminarily inflating a bladder and green tire to a torroidal shape using a liquid. In the method disclosed in Galleithner, inflating is not required, because the flexible element 7 (apparently alleged to correspond to the claimed "bladder") is made integral with a partial tire assembly 8 (apparently alleged to correspond to the claimed "green tire") prior to the shaping, and therefore there is no need to preliminarily inflate the bladder to come in contact with the "green tire."

The references in the Office Action to Brown and Mattson allegedly providing evidence that it is well known in this art to utilize heated water, the water being maintained heated by circulation, in a tire to effect tire vulcanization is, Applicants respectfully submit, not germane to the subject matter recited in these claims because the vulcanization process is not being argued by Applicants as a distinguishing feature. Any relationship of the heated liquid or heated water to preliminary inflation prior to being transferred to the vulcanizer is not suggested by either Mattson or Brown. And further, as discussed above, neither Laurent nor Galleithner involve a bladder and green tire combination being preliminarily inflated by supplying a liquid into the bladder.

Claim 1, and in like manner claims 5 and 8, recite, among other features, a preprocessing step [or apparatus] which involves joining a pair of holders supporting both bead portions of a green tire and a bladder and supplying a liquid into the bladder to preliminarily inflate the bladder and green tire into a torroidal shape and transferring the preliminarily inflated bladder and green tire into the vulcanizer, together with the holders. As such, Applicants respectfully submit that the subject matter of these claims provides a method

and an apparatus for producing a pneumatic tire, wherein a green tire is preliminarily inflated, before vulcanization, or even placement in a vulcanizer, into a torroidal shape so as to improve production efficiency. To this end, before the vulcanizing step or introduction into the vulcanizer, the bladder is introduced into the green tire, the bladder and green tire together are preliminarily inflated with a liquid, and the preliminarily inflated bladder and green tire are then transferred with the holders, as a single unit, into the vulcanizer in an attempt to streamline handling of the assembly and to thereby shorten the time required for the vulcanizing step and overall production process, thereby improving production efficiency.

Referring to the previously applied art, Bridgestone, for example, discloses that the bladder is inflated only after the green tire is transferred into the vulcanizer in a sequence opposite to that recited in the enumerated claims (see, e.g., col. 3, lines 29-49 and Fig. 2). Bridgestone therefore does not disclose a method and/or apparatus wherein a preliminary inflation is performed as is recited, among other features, in at least independent claims 1, 5 and 8. It is therefore respectfully submitted that Bridgestone, when taken alone or in combination with the other enumerated references, does not teach, nor would it have suggested, the combination of features recited in at least independent claims 1, 5 and 8. Further, Applicants respectfully submit that dependent claims 2, 6 and 7 are also neither taught nor suggested by the combinations of the applied references for at least the respective dependence of these claims on independent claims 1 and 5, as well as for the separately patentable subject matter which each of these claims recites.

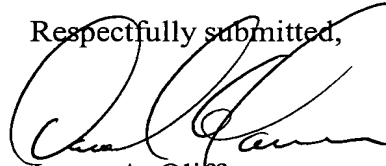
Accordingly, reconsideration and withdrawal of the rejections of claims 1, 2 and 5-8 under 35 U.S.C. §103(a) as being unpatentable over the various combinations of the applied references are respectfully requested.

For at least these reasons, supplementing the arguments made in Applicants' June 21, 2004 Amendment, Applicants respectfully submit that this application is in condition for

allowance. Favorable reconsideration and prompt allowance of claims 1, 2 and 5-8 under 35 U.S.C. §103(a) as being unpatentable over the combinations of the applied references are respectfully requested.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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JAO:DAT/rle

Attachments:

Petition for One-Month Extension of Time
Request for Continued Examination (RCE)

Date: February 7, 2005

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